

sation of the discharge and hemorrhage of an inoperable or recurrent carcinoma, together with relief of pain and healing of the ulcerated surfaces, is certainly an acquisition to our therapeutic armamentarium and worthy of a thorough trial.

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SUICIDE AND ALCOHOL.*

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Self-destruction is an act which was not infrequently resorted to by the ancients, some of whom looked upon it as a virtue just as the Japanese of our day consider harakiri a perfectly justifiable act under certain circumstances. With the advance of the Christian religion there was a decided diminution in the frequency of suicide, and it is claimed that from the 5th to the 12th century it almost wholly disappeared, due probably to the teachings by the church of the life hereafter of the suicide and the rigid rules of the church concerning the disposal of his body in unconsecrated ground. As the church began to lose its influence upon the masses at the time of the Reformation there was a revival of suicide until it has become an act of very frequent occurrence.

During the last century suicide has appeared to be on the increase wherever carefully gathered statistics have been obtainable. This has been the case in almost every state in the union, and that although attempt at suicide is punishable in many of them. At the same time one is not able to say that

this rapid increase is to any great extent caused by industrial, political or religious disturbances. The material comforts have been increased more and more, laws have been passed favoring the workman, and more philanthropic work is being done to-day than formerly. Religious questions of dissension are losing their influence upon the minds of to-day as compared with conditions in existence a century ago, and still it has been ascertained that the increase of suicides has been more rapid in Europe and America than the geometrical augmentation of the population and the general mortality. In Russia the population increased from 1860 to 1886 about 8%, but suicides increased 76%. On the other hand brainwork has reached a greater intensity than ever before. The seeking after wealth and satisfaction of sensual appetites are being spurred on. A man with a \$100.00 monthly income is trying to rival in enjoyments of life the man with a \$200.00 monthly salary and so on. At the same time moral precepts are losing their control and disappointment and misery are therefore the more felt. Education, a boon to humanity from an aesthetic point of view, is being steadily more thoroughly disseminated, inducing people to abandon the old advice of "cobbler, stick to your last" for the modern expansion ideas, inducing them to leave manual industries and agriculture, sending them away from their old associations to new surroundings, where the weaklings become dissatisfied, overburdened and predisposed to mental disease and suicide.

It is especially during the last quarter of a century that statisticians have shown an alarming increase of self-destruction. The suicide-ratio has, however, varied in different countries. In 1877 Saxony, which country was at that time first on the list, showed an average of 39.1 suicides per 100,000 inhabitants, while in 1836-1840 there were only 15.8. In 1880 there were reported to be three times as many suicides in San Francisco as in New York and 4½ times as many as in Philadelphia. In 1890 the ratio in San Francisco was 23.7, in 1900 it was 49.9 and in 1904 it was 72.6 per 100,000 inhabitants.

The question as to the mental health of a suicide has been frequently discussed pro and con. Some writers have even doubted that suicide is ever committed by a person of sound mind. Esquirol and Bourdin looked upon almost every attempt at suicide as a proof of a dangerous mental disturbance and as a sufficient reason for care in an insane asylum. This is the law to-day in Bavaria, where the authorities send every case of attempted suicide to a hospital for insane. Griesinger, the father of psychiatry, considered mental disease the chief but not the exclusive cause of suicide. A number of years ago Kraepelin said that he had found pronounced mental symptoms present in only 30% of the cases of attempted suicide that had come under his observation clinically, while Heller of Kiel, Holstein, found marked pathological changes affecting responsibility in about 43% of 300 autopsies on suicides of all classes, it being required by law in

* Read at the meeting of the San Joaquin Valley Health Officers' Association held at Fresno, October 13, 1908.

that province of Germany, that the body of every suicide must be subjected to a post-mortem examination at the pathological-anatomical institute at Kiel. In a recently published treatise on suicide Prof. Gaupp, late of Munich, reports that he found as a result of most careful investigation that only one case out of 124 cases of suicide was mentally well, as absolutely so as one was able to ascertain; 44 were insane—mostly manio-depressive insanity, dementia praecox or imbecility—the rest, not pronouncedly insane, were principally chronic alcoholists and psychopathic individuals. Gaupp's report deals with too small a number to justify definite conclusions, but his ratio of 44 pronouncedly insane persons among 124 cases is but a slight increase over what the majority of writers had formerly reported, namely: that insanity is found present in about 1-3 of the male and 1-4 of the female suicides. It might further go to show that if there has been a great increase in the number of suicides, this increase must be due to influences other than insanity, it being furthermore questionable, according to some recent writers, whether "the sum total of insanity in the community, both in and out of hospitals, is progressively increasing." In Scotland, the only country where statistics even approaching completeness are available, for instance, there has been no increase of insanity during the last three years—and a similar report comes from England and Wales.*

Alcohol plays a considerable role among the contributing causes of suicide—sometimes it is used by a person who does not drink to excess, as a bracer for the execution of the suicidal act, but more frequently it causes the inebriate to lose his energy and will-power so that he finds no other way to deliver himself from the chaos for which he is himself to blame than by taking his own life. Many writers consider alcohol the chief cause of suicide, and the majority think it is at least second or third in importance. A long continued excess in liquor leads to increased misery, domestic quarrels, dislike for work, diminished capability for work, abnormal irritability of mood with disposition to melancholy depression, to ideas of jealousy and persecution—finally mental and moral qualities as well as the physical health suffer.

Ponomarew and Hubner found 114 alcoholics among 298 suicides in St. Petersburg, 112 cases of insanity and 21 cases of incurable disease. Among the colored people in the Southern States suicide as well as insanity has increased every year with the increased consumption of liquor among them. In departments in France where the most alcoholic drinks are used there has been a correspondingly high record of suicide, insanity and crime. In 36 departments there were in 1897, 2540 cases of alcoholic insanity, while in 1907 the number was 3988, an increase of 57%.

With the view of ascertaining the prevalence of suicidal attempts among the manifestations of men-

tal derangement leading to commitment of alcoholists on the one hand and all other forms of insanity on the other, I have carefully compiled the records of 734 patients, whom I have had under personal observation in my department of the State Hospital at Stockton during the five years beginning with July 1st, 1903, and ending with June 30th, 1908. The results of this investigation are shown in the following table:

	No. of patients suffering from insanity other than alcoholism	Att. Suicides among all other forms of insanity	No. of alcoholists	Number of alcoholic suicides	Patients received
July 1, '03-June 30, '04	104	11	17	5	121
July 1, '04-June 30, '05	132	9	22	4	154
July 1, '05-June 30, '06	108	10	33	12	141
July 1, '06-June 30, '07	118	11	36	6	154
July 1, '07-June 30, '08	134	25	30	7	164
Total No. for 5 yrs.	596	66	138	34	734
34 att. suicides among 138 alcoholists.....24.63%					
66 att. suicides among 596 of all other forms of insanity11.07%					

According to this table it would appear that there has been a marked increase in the number of alcoholists received in proportion to the total number of commitments during the four of the five years and that the number of the alcoholic suicidal attempts prior to admission has varied but slightly during the five years with the exception of the year ending June 30th, '06, when the number of unsuccessful alcoholic suicides was twice the usual average. Of these 12 unsuccessful suicides 8 of them occurred during the 2½ months immediately following the earthquake. During the five years 34 unsuccessful suicidal attempts have occurred prior to admission among 138 sufferers from some form of alcoholic insanity or in 24.63% of the cases while only 66 out of 596 patients presenting symptoms of other forms of psychosis have attempted suicide prior to their arrival in the institution, i. e. in 11.07% of the cases. In other words unsuccessful suicidal attempts are more than twice as frequent in alcoholic insanity as in all other forms of insanity combined, and one out of every four sufferers from alcoholic insanity makes attempts at self-destruction. The table also appears to show that about 100 suicidal attempts occur among 734 patients admitted, or in other words that one patient out of about every seven makes an unsuccessful attempt at suicide prior to admission to the asylum.

With regard to the number of cases of alcoholic insanity among the total admissions to the Stockton institution my figures show that there were 138 among the 734 cases, which is 18.8%, about 3% higher than my estimate two years ago.

The alcoholist is driven to commit suicide under different circumstances depending upon a varied state of affects:

1. He may be led to take his own life when the alcoholism has assumed a melancholy form—when he is in an extreme state of mental depression.
2. He may be subject to vivid hallucinations

* "Some Origins in Psychiatry" by Clarence B. Farrar, Am. Jour. of Insanity, January, 1908, p. 526.

which are pronouncedly persecutory in nature: a mob outside the room clamoring for his blood, when he hears calls of "hang him," "shoot him," etc.—or he sees devils or other horrid spectacles which fill him with terror, to escape all of which he prefers death.

3. The individual who because of misfortune in life was depressed when he began to drink to excess, may be so overwhelmed with an absurd exaggeration of his troubles or difficulties during the intoxication that the sudden suicidal impulse is carried into effect because of the absence of calm deliberation;—and 4. After he has recovered from the mental effects of one of his debauches, a despair of ever being able to control himself seizes the alcoholic, when he realizes the social and financial ruin which stares him in the face. The despair is associated with an enfeeblement of the will-power and frequently with a marked irritability, which accounts for the trivial motives of some of these suicides. One alcoholic kills himself because he has a slight dispute with his wife, another because his friend will not lend him a few cents or dollars to spend in some saloon, a third because the barkeeper refuses to give him another drink, etc. In leading to this enfeeblement of will-power alcoholism may also bring out symptoms of nervous weakness or hysteria when disposition to this disturbance is present in the individual. This is especially illustrated by the efforts at display and the sham attempts at suicide frequently met with among alcoholists. They lack the courage to undertake the self-destruction in a way to insure success. The cut they make in the throat or on the wrists is often not much more than a scratch and the attempt at drowning is either made in shallow water, or they no sooner reach the water than they shout for help with all the vigor at their command. Sullivan's statistics illustrate this feeble-hearted character of the suicidal attempts of alcoholists. He found 77.5% of alcoholists among a certain number who failed to commit suicide, but only 12% of alcoholists among those who succeeded.

The problem of reducing the frequency of suicide among alcoholists resolves itself into efforts in the direction of doing away with the excessive use of liquor and reclamation of those who have succumbed to its influence. From the standpoint of general prophylaxis, all efforts at alleviating misery and poverty and improving the physique during childhood and youth will tend to accomplish this. A more careful instruction of the child in moral ethics, which is much neglected in many quarters; the work done by Young Men's Christian Associations, especially their work of popularizing the practice of physical culture among adults as well as children, tending to bring the physical health to the highest possible standard, would lead to abstinence from alcoholic excesses and in a general way tend to the lowering of the suicide rate. The correction of a certain other deleterious influence would likewise have a prophylactic effect. That is a change of policy on the part of the daily press with regard to the publication in detail of news of a certain class. Just as man puts more food into his stomach

than is necessary to sustain life, so does the press feed the public with a superabundance of mental pabulum (?) in the form of news in detail. On a great many the administration of some forms of this mental food, such as reports of crimes, domestic unhappiness and suicides, has a very injurious effect. It tends to produce nervousness and at times may result in imitations or auto-suggestive acts; especially is this the case with regard to reports of suicides when read by the nervous and degenerated or by the alcoholic weakling. On the subject of this influence of suggestion I am reminded of the experience of Sir Charles Bell, the noted surgeon to the Middlesex Hospital in London (1764-1824), who while he was being shaved told his barber about having just sewed up the wound of a man who had made an unsuccessful attempt at suicide, and Bell gave the anatomical reasons for his failure. After a little the barber excused himself, went into an adjoining room where he was afterwards found with his throat cut in an anatomically correct manner. The antidote to the poisonous influence of the press in this direction is "silence." A much curtailed report of suicides and crimes would therefore be a charitable as well as a prophylactic act on the part of the newspapers. Now as to the possibility of the prevention of the evil itself.

Esquirol said that suicide was a disease. To a certain extent this is true, and as self-destruction and disturbances of the peace by alcoholics, whose next move may be a suicidal attempt, are overt acts which come under the eye of the authorities, the question presents itself: What interest do the authorities in our State take in the treatment of the alcoholics? They let the alcoholic—in the absence of symptoms of alcoholic insanity—suffer the penalty for his crimes. In the case of a disturbance of the peace or an extreme state of intoxication he is sent to jail—thrown in numbers of six to a dozen or more into a dark cell where there is just room enough to lie on the floor in more or less filthy surroundings for thirty to ninety or more days. After this he is again turned loose on himself—and the community, soon lapsing into the life he led prior to his arrest, under which circumstances an improvement is out of the question, the steady drinking rendering him unstable and robbing him of all energy. Aside from the fact that the above treatment of the alcoholic is only custodial and that in a cruel form, it often leads to grave mistakes, when cases of serious brain-troubles are marched into jails under the guise of alcoholic intoxication—all of which could be prevented by adequate medical attention and proper provision for the caretaking of doubtful cases. Such mistakes and inhumane treatment have occurred from time to time in our jails. The sessions of police courts give almost daily accounts of offenders, arrested for the third, fourth, sixth time or more. In the Stockton as well as in other institutions numerous instances are met with where alcoholists have been recommitted several times and in some cases unsuccessful attempts at suicide have even repeated themselves in the same individual with each

recurring attack of delirium tremens or other form of alcoholism. An instance of a patient committed to the asylum seven times—each recommitment because of a new outbreak of delirium tremens or subacute alcoholism has occurred at the Stockton hospital—entailing an expense to the State, alone for the legal proceedings, of at least \$300.00. Would a sojourn at a home for inebriates where an attempt at reclamation could have been more successfully carried out, not have been a better investment?

The only chance the alcoholicist has of getting rid of the bane of his existence is to be so cared for that he has not only no opportunity to get liquor for a protracted period but that he is given surroundings which stimulate him to exercise his powers of resistance when facing the temptation to drink. These surroundings are not obtainable at hospitals for the insane, to which most of these cases are sent in this State. Not only do the cases not receive the proper surroundings but, as they are frequently sent away again in a month or even in less time, their detention in insane asylums can have no more curative effect than their confinement in jails. If the State is to do its duty to these unfortunates humanely and correctly it will have to make a reform in the mode of disposal of the chronic drunkard, which is not possible until it has established a State Home or Sanitarium for inebriates.

PRIMARY PNEUMOCOCCUS PERITONITIS.

WITH REPORT OF A CASE.

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The rather unusual occurrence of the invasion of the peritoneum by the pneumococcus has received more or less attention since the publication by Bozzolo,¹ in 1885, of a report of a case in which a pneumococcus infection of the peritoneum was a complication.

Within a few years Cornil, Savestre and others reported isolated cases, and in 1890 Nelaton performed the first operation for the relief of this condition, but without success.

In 1903 Von Brunn² collected fifty-seven cases of pneumococcus peritonitis in children and fifteen in adults.

In 1906 Annand and Bowen,³ of London, in a complete and scholarly paper reviewed the subject up to that time and reported a series of fifteen cases seen by them personally, only four of these, however, being primary infections.

Pneumococcus peritonitis is divided into the primary and secondary forms, and each of these is again divided upon a pathological basis into local and diffuse types. The secondary form is merely a blood- or lymph-borne infection from a more or less distant focus. Pneumonia of the lungs is the most common source, the next being infection of the middle ear, and less frequently infection of the appendix or of the uterus and its adnexa. This secondary form offers but few problems of diagnosis. The develop-

ment of a peritonitis in an individual already suffering from a pneumococcus infection indicates at once the nature of the trouble.

Very different, however, is the occurrence of a pneumococcus peritonitis as a primary infection in a person apparently well and strong, especially if it be a diffuse inflammation from the start. A sudden agonizing pain in the abdomen, accompanied by rapid and feeble pulse, marked cyanosis, fever, prostration and rapidly developing signs of a general peritonitis and a profound toxemia, resembles nothing so much as a perforated gastric ulcer, and for this or some similar accident it is usually mistaken. Of forty cases recorded by Annand and Bowen but five recovered—a mortality of 88 per cent. It is hard to understand why this disease should be credited in the few text-books that notice it at all with having a good prognosis. It must be that the diffuse form has been confused with the milder local type of inflammation. Here the onset is slower and treatment more efficacious, the figures being just reversed—over 81 per cent of the local infections recover.

As to the portal of entry of the infection in primary peritonitis it is evident that we have to deal usually, if not always, with infection directly through the mucous membrane of the intestines.

Calmett,⁴ in France, and Shroder and Cotton⁵ and others in America, have shown that it is a very frequent occurrence for the tubercle bacillus and pneumococcus to pass through the walls of the intestine without either losing their virulence or causing a lesion at the site of migration. Flexner has shown that the pneumococcus is frequently present in the intestine, especially during conditions of subacidity and it is interesting to note that in many reported cases of primary pneumococcus peritonitis the attack has been preceded by gastric symptoms and in not a few by the signs of acute enteritis.

Case. The patient was a male, forty-two years old, a teamster by occupation, of excellent family history and personal habits. In infancy he was said to have had an abscess of the lung when six months old. Never consulted a doctor until a year ago, when he was troubled with some pain before and after eating and belching of gas.

For the past three months he had had some indigestion and had lost some weight. On the day before his death at 5 p. m., while at work, he was seized with a severe pain in the abdomen and vomiting. He became worse during the night and was brought to San Francisco in the morning, when he was found to be suffering from general peritonitis and profound toxemia. On account of the preceding gastric symptoms a perforation of some portion of the gastro-intestinal tract was suspected and he was sent to the hospital for operation. At this time he was failing rapidly and died before operation, about twenty-six hours after the attack began.

Autopsy by Professor Ophuls showed that the abdomen contained a large amount of thin pus with flakes of fibrin. The abdominal viscera were carefully examined for a lesion to account for the infection, but without result. The gallbladder and appendix were normal. No perforation or abnormality of the gastric walls was found. The lungs showed edema and hemorrhage, and an old obliterating pleurisy of the left pleura. The smear and culture of the pus from the abdominal cavity showed pneumococci.